



The Raleigh Amateur Radio Society's **EXCITER**

GET INVOLVED

- RARS General Membership meeting: **Second Tuesday** of the month.
- The RARS net meets every night except Saturday @ 8 p.m. on 146.640.
- The RARS Technical & Trader's net: Saturdays @ 8:00 PM on 146.64.
- RARS meets for a monthly dinner on the **third Tuesday** of each month.
- On the **fourth Tuesday** of every month, in-person meeting at Ridge Road Baptist Church where there will be project tables, demos, snacks, and socializing.



PUBLIC SERVICE EVENTS

Interested in helping? Visit
<https://www.rars.org/public-service.php>

frequently for our ham public service schedule.

RARS General Meeting

Date: June 10, 2025

Topic: RARS Field Day

Presenter: Marty Young, W4MY

Where: Ridge Road Baptist Church

Time: In-Person and Zoom Meeting at 7:30 PM, [More info at RARS.org](https://www.rars.org)

RARS In Person Gathering

Date: June 24, 2025

Where: Ridge Road Baptist Church

Time: 7:00 PM

In-person Gathering at Ridge Road Baptist Church where there will be project tables, demos, snacks, and socializing.

RARS Officers

PRESIDENT

Fin Gold
NC4FG
nc4fgfin@gmail.com

VICE PRESIDENT

Chuck Till
K4RGN
k4rgn@outlook.com

SECRETARY

Julie Royster
KT4JR
919-782-1624
KT4JR@arrl.net

TREASURER

Greg Seamster
KE4PAX
919.859.0029
KE4PAX@arrl.net



The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the amateur radio community in the greater Triangle area. In 1999, the society incorporated a new RARS and obtained 501(c)(3) non-profit tax status.

The objectives of the club are to promote worldwide friendship through amateur radio; to be of public service by providing radio communications in times of disaster, emergency, or civic needs; to educate members in radio technique, and to provide training classes to assist in obtaining amateur radio licenses.

Anyone interested in amateur radio is eligible to apply for membership. Regular dues for licensed amateurs are \$18 per year. (From July 1 through June 30.) Additional licensed immediate family members pay \$5 each per year. Dues for licensed full-time students and licensed seniors 60 and over are \$12 per year. Unlicensed individuals may become associate members for \$9 per year. Applications for membership are available from the treasurer or on the RARS web site.

<https://www.rars.org>

Exciter

The Exciter is the official newsletter of the Raleigh Amateur Radio Society. It appears each month as a PDF on the RARS website at www.rars.org. Members receive email notification when the latest version is available. Please provide your email address to the Treasurer.

The Exciter welcomes articles, advertisements, and other contributions. To submit a piece to the newsletter, please contact the Editor. The Editor reserves the right to edit any and all pieces. The submission deadline for each month's Exciter is the Saturday that is ten days before the general meeting. All submissions must be final. Drafts are not accepted.

The views expressed in the Exciter are those of the individual authors and do not necessarily reflect the views of the Editor or RARS.

Tom Lewis, N4TL, editor (editor@rars.org)

Exciter President's Message for June 2025

Happy June!

What's happening this month?



Field Day is June 28th!

Our theme this year:

Share the Mic, Share the Key, Share the Keyboard

Our measurement of success:

The more participants, the better

Please come out any time 2PM Saturday to 2PM Sunday and watch, help operate, help log, or just visit. If you sign up for a station using our [Signup Genius](#), you will have priority, but walk-ups will still get a chance to play. The time slots are hourly and run overnight. Come play in the middle of the night!

New hams and non-hams are welcome! We will have a “Get-on-the-Air” (GOTA) station with excellent coaching so you can try out HF contesting in a low-key environment.

See the [RARS Field Day](#) web page for details

New Partnership

We are pleased to announce a new partnership with the Greater Triangle Area Chapter of the Red Cross!

The Red Cross will provide us with indoor storage space, a joint HF/VHF/UHF base station room, training rooms, and possible small-group meeting space.

We will be helping them test and update their internal radio systems. For that effort, we'll be asking for volunteers to join the Red Cross and participate in the fun.

Many RARS members have asked how to get involved with local emergency ham support.

This is a great opportunity to join us as we build and implement a comprehensive plan for local emergency response using both RARS and Red Cross resources. Please contact Tony O'Connor K1OC at tony.oconnor@redcross.org for more information.

Exciter President's Message, continued

2025/2026 RARS Budget

The board of directors has approved the budget for the next fiscal year running July 2025 to June 2026. Here is a link to the [RARS 2025/2026 Proposed Budget](#).

The main changes from last year:

- \$3,000 budgeted income from RARSfest instead of \$4,000 to allow for growth reinvestment.
- \$2,000 "Other" budgeted donation.
- No spending on storage by storing everything at the Red Cross (saves \$2,028/yr).
- Lower repeater expense by dropping the Fairgrounds phone landline (saves \$720/yr and already done).
- New interest income of \$900 (for the entire fiscal year) from a CD we invested in.
- A new "Improvements" \$1,000 discretionary fund that rolls over like the Repeater fund.
- A request for \$4,000 to spend on meeting A/V equipment, new video projector, and meeting support tools.

Please enter comments and questions in the **#25-26-budget** Discord channel available to all RARS members.

To get this approved, we need **ALL HANDS ON DECK** to come to or Zoom to the **June 10th club meeting** so we can get a quorum and vote.

73,
Fin Gold, NC4FG
President
Raleigh Amateur Radio Society

May 13, 2025 RARS meeting

President Fin Gold NC4FG called the meeting to order at 7:30 pm. He reminded Zoom participants of a few notes about using Zoom. See the minutes for all the details during the meeting on [page 23](#).



Fin Gold, NC4FG starting the meeting



RARSfest volunteer prize
Nancy Torborg, KB2TNR, RARSfest Chair presenting
the Yaesu FT-70DR to Tom Schwartz, NC4TS



Everyone waiting for the meeting to start

May 13, 2025 RARS meeting, continued



The door prizes winners, left to right

Joe Haggerty, N4BJH; Josh Kurland, KR4BTW;
Charles Swindell, WB4DCM; Richard Kroeger, N1FUA



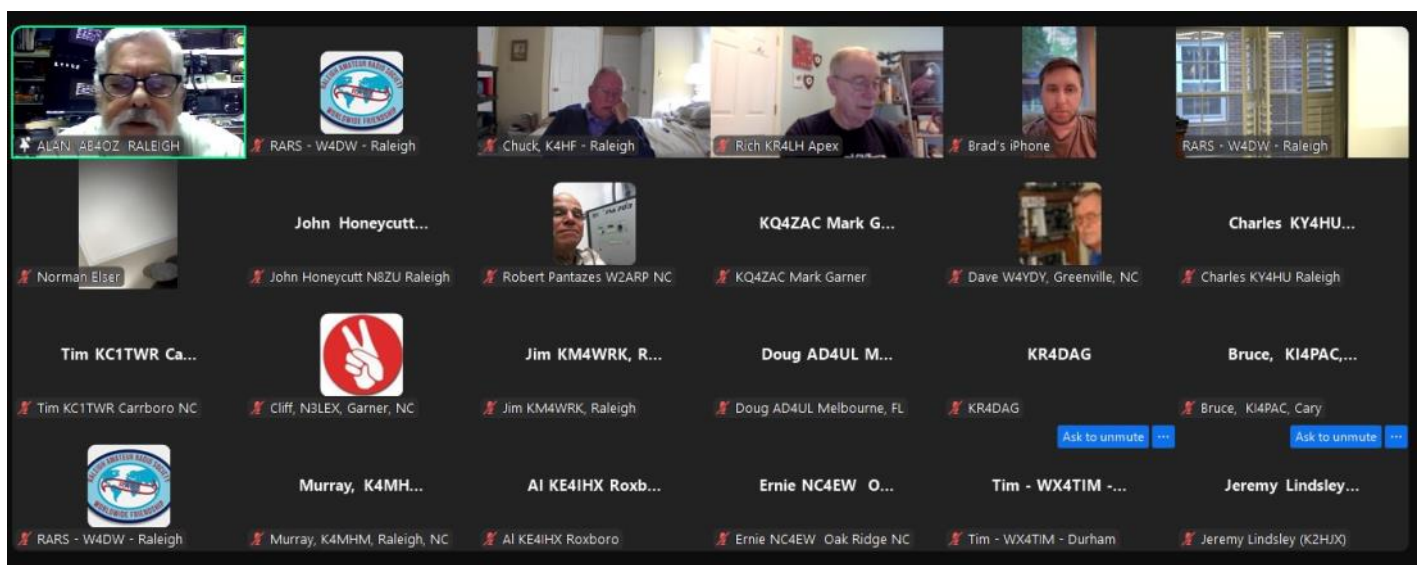
The origins of Packet Cluster

Tom Lewis, N4TL going over how the DX PacketCluster got started in the 1980s

May 13, 2025 RARS meeting, continued

Full Name	Call Sign	Full Name	Call Sign
Ken Latchum	AD4GX	Josh Kurland	KR4BTW
Tony O'Connor	K1OC	Nick Baker	KR4BTY
John Hollowell	K4JAH	Judah Pulley	KR4CXF
Chuck Till	K4RGN	Julie Royster	KT4JR
Barry Wheeler	K9IUT	Craig McCrory	KY4WM
Tadd Torborg	KA2DEW	Richard Kroeger	N1FUA
Nancy Torborg	KB2TNR	Joe Haggerty	N4BJH
Richard Dennis	KE4COD	Jim Barron	N4CUT
Greg Seamster	KE4PAX	Tom Lewis	N4TL
Dave Cannon	KE7UJX	Fin Gold	NC4FG
Jon Suen	KG6K	Tom Schwartz	NC4TS
Dan Reed	KK7EUJ	John Bowser	NOCALL
Devin Hedge	KN4FVH	Demi	NoCall
Rob Bowser	KO4HUI	Bob Starkenburg	W4TTX
Denny Oestreich	KO4IBL	Dale Jones	WA4JCK
Paul Dugdell	KO4PZA	Charles Swindell	WB4DCM
Thomas Karcher	KQ4FKA	Wilbur Goss	WD4RDT
Jay Gilleece	KQ4PSK	Chuck North	WJ4A
Ralph Selmont	KQ4RZI	Bill Berzinskas	WW1H
Hans Enders	KQ4UXZ	Dan Stancil	WY3O
Christine North	KR4ANI	Dennis Mason	WZ0Q

44 People attended in person



Screen capture showing 21 on Zoom, 65 total

Websites listed in “The origins of Packet Cluster” presentation

List of DX Clusters and Reverse Beacon Network websites

<https://www.ng3k.com/misc/cluster.html>

list various node software

<http://www.dxcluster.info/dxcsoft.htm>

Parks on the air website

<https://pota.app/#/>

Digital modes world map

<https://www.pskreporter.info/pskmap.html>

holy cluster

<https://holycluster.iarc.org/>

YouTube video from DXengineering about cw skimmer and RBN.

<https://www.youtube.com/watch?v=5gfd8nSrMLA>

RARS MONTHLY SUPPER , IHOP RESTAURANT MAY 20, 2025



Names left to right around the table.

Chuck Littlewood, K4HF; Dave Daniels, W4EIP; Chuck Till, K4RGN;

Dennis Mason, WZ0Q; Bob Van Den Berghe, WA8ZLQ;

Bob Starkenburg, W4TTX; Ralph Selmont, KQ4RZI; Aro Lintner.

<https://www.rars.org>

Monthly In-Person RARS Gathering, May 27

Ridge Road Baptist Church, at [2011 Ridge Road, Raleigh](#)

The meeting starts at 7:00 pm in the Fellowship Hall, but we start setting up at 6:00 pm, and you are welcome to bring your own ham radio equipment and projects to demonstrate, show off, or just work on with other like-minded hams -- we have plenty of tables. You might also find sources of coax, connectors, zip cord, Powerpoles®, and whatnot.

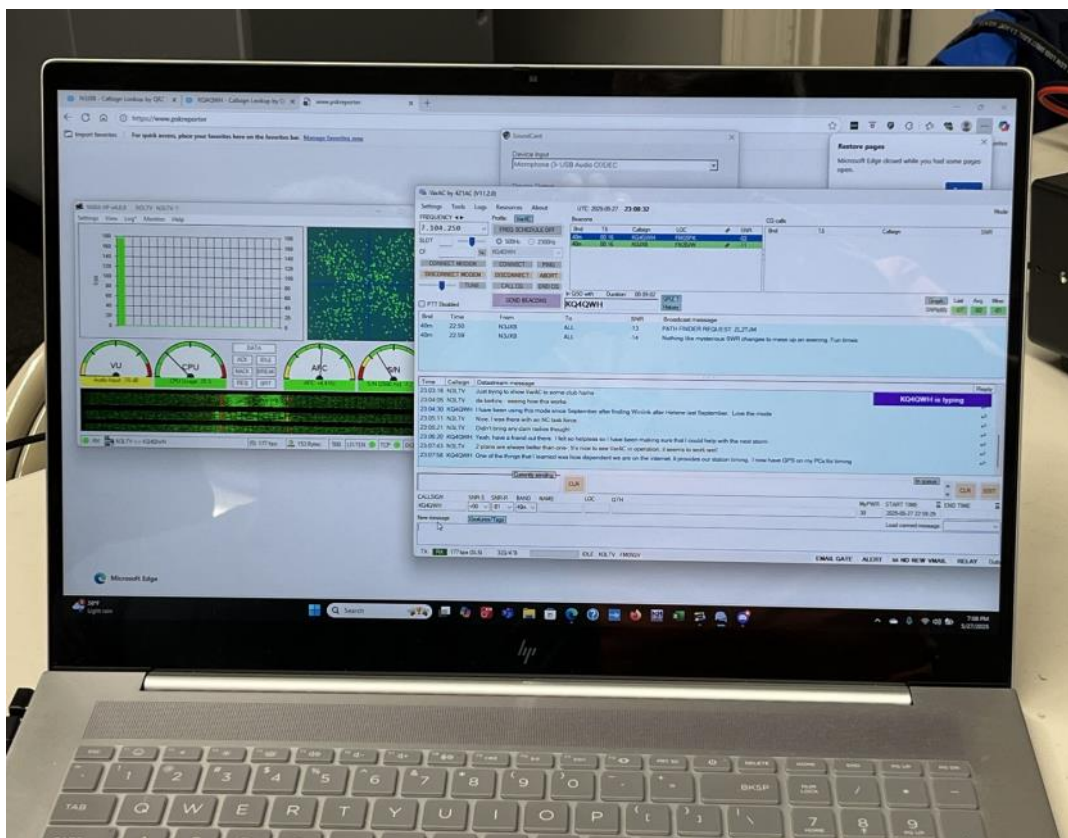


Miscellaneous pictures taken at the gathering

Monthly In-Person RARS Gathering, May 27, continued

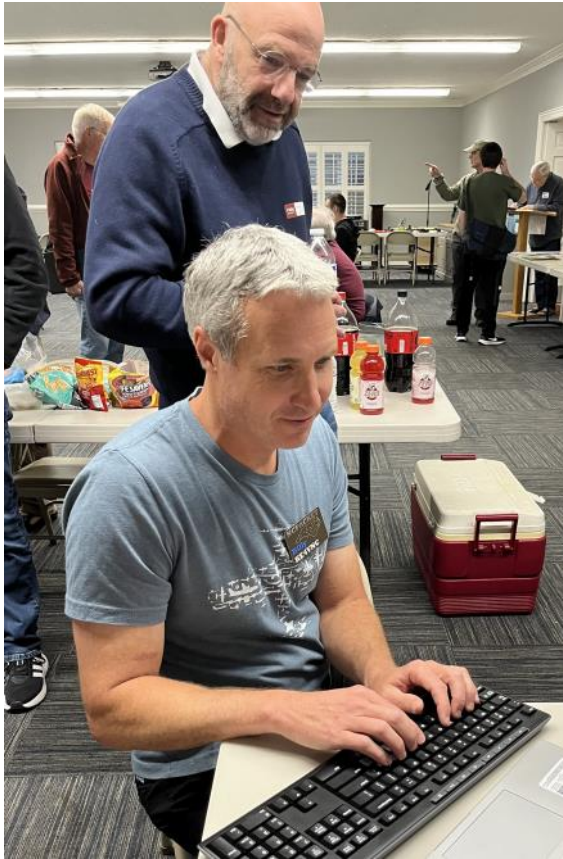


ICOM IC-7300 display showing the VarAC 40m frequency used for contact.



Display of VarAC Windows showing the contact chat.

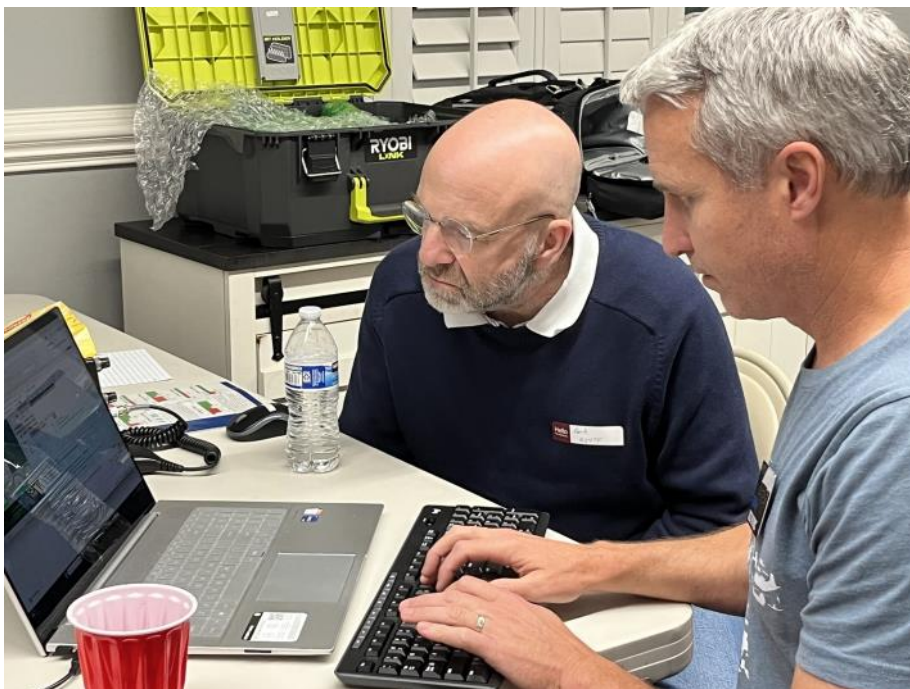
Monthly In-Person RARS Gathering, May 27, continued



Billy, KE4VNC
(wearing a T-shirt)
initiating a VarAC
contact with
KQ4QWH in
Coats, NC.

Here's a [VarAC YouTube link](#) to learn more about VarAC.

I encourage all members to come to the RARS Gathering and play and learn on HF.
73, Doug N3LTV



Park, KZ4TF
was visiting
our RARS
Gathering and
showing interest
in VarAC and
observing the
contact.

Thanks to Doug, N3LTV, for the pictures and comments.

Monthly In-Person RARS Gathering, May 27

Full Name	Call Sign	Full Name	Call Sign
Austin Hyder	K4HYD	Jonathan Osbrink	KB8QNE
Barry Wheeler	K9IUT	Mark Freeze	WD4KSE
Billy Janke	KE4VNC	Michael Johnson	KZ4LY
Chuck North	WJ4A	Mike Kenley	KO4PAS
David Crawford	KF4VXJ	Nancy Torborg	KB2TNR
Dennis Mason	WZ0Q	Park Anders	KZ4TF
Doug Wall	N3LTV	Richard Kroeger	N1FUA
Fin Gold	NC4FG	Rob Bowser	KO4HUI
Jay Mulik	WJ0J	Tadd Torborg	KA2DEW
Joe Haggerty	N4BJH	Tim Thurber	WX4TIM
John Bowser	NOCALL	Tom Lewis	N4TL
John Hollowell	K4JAH	Tony O'Connor	K1OC
John HoneyCutt	N8ZU	Tyer McGee	KO4BZA
Jon Suen	KG6K	Will Jabber	WY5L

28 People attended the May Gathering

Join the 2025 EHPC Hurricane Communications Exercise

The Eastern Healthcare Preparedness Coalition (EHPC) in Greenville, NC, will be conducting a statewide communications exercise (COMMEX) on Tuesday, June 17th, from 9:00 AM to 3:00 PM to prepare for the upcoming hurricane season.

This virtual exercise allows participants to use their home station equipment and computer, making it easy to join from the comfort of home. As many amateur radio operators as possible are encouraged to participate, especially those with an interest in Emergency Communications (EMCOMM). No AuxComm certification required!

Your involvement is crucial to ensuring Eastern NC is ready for whatever the upcoming hurricane season may bring.

For more details, visit the link: [\[2025 EHPC Hurricane Communication and Information Sharing Exercise\]](#)

Alternatively, contact [Doug Wall \(N3LTV\)](#) for information.

HAM Radio Lunch

Every Thursday at the New York Diner
909 McKnight Drive, Knightdale, NC 27545
11:15AM



May 29, 2025, Names clockwise around the table

Dennis Mason, WZ0Q; Alan Pitegoff, AB4OZ; Chuck Littlewood, K4HF;
Walt Chambers, K4ZVK; Denny Oestreich, KO4IBL; Howard Goodman, N4KYW;
Chuck Till, K4RGN; Ken Latchum, AD4GX; Richard Dennis, KE4COD;
Tom Lewis, N4TL; Joe Owen, K4HEW, arrived after the picture was taken.

RARS Member Birthdays

Robert	K4RWR	06/03
Navin	KF4LFW	06/03
John	KK4JCN	06/03
Dan	KI4ZBW	06/03
Tony	W4BMX	06/04
Norm	WX7NDB	06/04
Gwen	KF4EUT	06/05
Daniel	KD4KXI	06/05
Bruce	KI4PAC	06/07
Rick	N4VQT	06/07
Nathan	K4GRU	06/09
Cliff	N3LEX	06/09
David	W4OFO	06/10
Charles	NZ0I	06/11
Ken	KN4GUS	06/11
Gary	KQ4BTC	06/11
Matt	KN4MIO	06/11
Leila	KO4ZTR	06/11
Edward	KQ4HTF	06/12
Dan	KK7EUI	06/12
Jon	KI6BHF	06/13
Jonathan	KB8QNE	06/14
Jon	KO4WLA	06/16
Big T	KN4WJL	06/18
Mark	N4MQU	06/18
Wade	KK4UGY	06/19
Robbie	KA4RDR	06/19
Steve	W4MGT	06/21
Patrick	KM4QDZ	06/22
Harry Spaulding		06/28
Christopher	W7AWD	06/29
Mike	K4MBX	06/30

RARS New Members

Steve Barry	N3FF
Stan Dicks	W4AG
Sebastien Couture	KR4DVT

Upcoming Hamfests

Copied from <https://www.qrz.com/db/AB4OZ>

AB4OZ HAMFEST SAT, JUNE 21, 2025

FIRECRACKER HAMFEST Salisbury, NC, SAT. JULY 12, 2025

CARY HAMFEST SAT. JULY 19, 2025

FAYETTEVILLE HAMFEST SAT. AUGUST 9, 2025

May 2025

RARS Net Report

31 2m nets: 399 checkins, 842 minutes

4 6m nets: 40 checkins, 61 minutes

Julie Royster, KT4JR, RARS net manager

Repeater Update

Jon Suen, KG6K, RARS Repeater Chair

I'm happy to announce that RARS has a new repeater! The D-Star/Digital repeater, which has been in work for quite a while, has now been deployed.

The new system is multi-mode, based on MMDVM, running the same core software as a hotspot and the operation is identical. This provides a local digital repeater that supports all the common digital voice modes and also provides worldwide Internet radio links when you're away from home.

The **new repeater frequency is 440.525+**. It is currently co-located at RTP with the 145.13 repeater, and the coverage is roughly the same. Here are the supported modes:

- D-Star. Set RPT1 callsign "W4RNC B", RPT2 "W4RNC G" (2 spaces in each). To link to a reflector, set the UR callsign as the reflector name, module, and "L" (e.g. REF001CL) and transmit for one second. Once linked, switch the UR call to "CQCQCQ" for traffic. Unlink by kerchunking "U" (7 spaces). To echo test set UR to "E" and status info is at "I".
- DMR. Use color code 3. This mode is connected to Brandmeister. Slot 1 carries the RARS talkgroup 314578 as static, slot 2 is available for dynamic linking. Unlink with talkgroup 4000. Status can be viewed here: <https://brandmeister.network/?page=device&id=314578>
- Yaesu System Fusion. Simply use the WIRES-X menus in your radio to control the link to YSF reflectors. Connect to 00001 for an echo test. Leave unlinked for local traffic.
- P25, use NAC \$339 and kerchunk the appropriate talkgroup. Use talkgroup 1 for local traffic, talkgroup 10 is a parrot, 9999 unlinks.

Links will drop off after 15 minutes of no input activity, but please unlink when you're finished. Users should observe their radio's busy indication to make sure nobody else is using a different mode before bringing up a link.

Also new is the **Bayleaf 444.525** hardware. Now powered by a Motorola Quantar repeater, it's running at full power for the first time in a while, and coverage is much improved. Along with analog FM, this repeater supports P25 in mixed mode. Digital users should program mixed mode receive and **NAC \$339**. Analog users should enable tone squelch (82.5) to avoid hearing the digital

Repeater Update, continued

transmissions. This will be used to support RARS's emergency communication efforts in the future.

Along that line, I recently attended a NC state emergency management meeting reviewing hams' response to Hurricane Helene. The importance of data communication was stressed, but also that hams need to be able to pass voice traffic quickly. In the life-or-death situations encountered, 15 seconds is all you have!

If you've listened to police radio, even conventional systems, they don't double when people are making fast-paced transmissions during a chase. Yet, they don't have to say "this is" and take a pause and cycle the repeater. How? Since the 90's, commercial radios have transmit inhibit. They use the presence of a received carrier or PL tone to determine if the channel is free. If another repeater user is already transmitting, your radio will block attempts to transmit with a denied tone ("bonk").

It turns out most ham radios have this function too: *busy channel lockout* (Yaesu) or *repeater lockout* (Icom). If you have an Anytone, in the specific channel, set Busy Lock to Channel Free. We've adjusted repeater timing on RTP and Bayleaf to work seamlessly with this function. Therefore, **please turn on transmit lockout on carrier detect**. This eliminates inefficient and annoying doubling!

With our new systems, RARS has the only D-Star repeater currently on-air in the Triangle (RARS had the first D-Star repeater in the area back in 2007), the only P25 repeaters, and the only YSF repeater with outgoing reflector access!

The hams who have worked to get both systems up and running include the Repeater Committee: Chuck K4RGN, Fin NC4FG, John K4JAH, and myself. I'd also like to thank Greg KE4PAX for handling the purchasing and Internet access at the sites, and Tom N4TL for repairing equipment. The RTP site is generously provided to RARS by Charlie NC4CD.

Finally, this wouldn't have been possible without the support of RARS membership, and I welcome any feedback.

RARSfest, was represented at the Dayton Hamvention

The Raleigh Hamfest, RARSfest, was represented at the Dayton Hamvention last month. The organizers generously gave us a booth in the Hertz Building from May 16 to 18.

By Nancy Torborg, KB2TNR.



DJ9YL, Barbara Meier from Germany, stopped by the booth to tell us that she and her husband travelled to RARSfest and purchased their Hamvention tickets while in Raleigh! Hope they tell their friends.



Helping at the booth were Tony K1OC and Jeremy K2HJX; this was their first trip to Hamvention! They look pretty excited.

RARSfest, was represented at the Dayton Hamvention, continued



The booth was very busy open-to-close Friday and Saturday; things were winding down on Sunday. And while Sunday is not a great day for flea market shopping, it is an EXCELLENT day to catch up with old and recruit new dealers... Hopefully, those leads will pan out over the next few months.

On Saturday, we put out a call to all RARS members to come to the booth for a “family photo”.



We had a great time, and cannot wait to return in 2026!

Starting at the front left, Rob Bowser, Nancy Torborg, Mary Holtschneider, Tony O'Connor, Tadd Torborg, Carl Davis, Steve Jenkins, Jeremy Lindsley, John Brier, Brantley West, Don Rotolo (a good friend of RARSfest!) and Sam Jenkins, KI4TRG (Steve's son)

Don't Plug it in.

If you have a piece of electronic equipment that has not been on for many years - Don't plug it in. It is much better to bring it up slowly with a variac. This will give the electrolytic capacitors time to reform. These capacitors use an oxide layer for the dielectric. When the capacitor is not used for a long time, this layer can dissipate. It can be reformed when low voltage is applied to the cap. Slowly bringing the voltage up to the capacitors rating allows the layer to build up. There can be other problems with old equipment. Rubber insulation was used in the 1940s and can fall off the wires. As well as many other problems. Get some help if you need it.

I recently helped a ham with a linear amplifier that requires 240VAC. I don't have a variac for 240 volts. To reform the high voltage capacitors, I made sure the power plug was nowhere near the 240 volt outlet. Then took the cover off and connected a variable voltage DC supply to the high voltage capacitors. The voltage was set to 50 volts. This put 16.7 volts on each of the three series connected capacitors. The voltage was gradually increased to 400 volts over a 45 minute period. It was left at 400 volts for an hour. After this was done the variable voltage supply was disconnected and the cover of the amp put back on. The amp was plugged into 240VAC and turned on. The voltage on the three caps went to 1,200 volts, which is 400 volts each. Good news, no smoke and the amp worked okay.

Be safe if you work on high voltage equipment.

73 Tom, N4TL

Thanks to Nate Moreschi, N4YDU, for proof reading this for me and making a few updates.

RARS Classifieds

Copied from <https://www.rars.org/classifieds.php>

The items below were listed within the last 30 days on the RARS website.
Check the RARS Classified List on the RARS website regularly for new items.

FS: Icom Microphones IC-HM9 and IC-HM14

Posted May 25th, 2025 by: [W4BOH](#)

Contact: infomet@embarqmail.com

NEW in boxes

HM9 has two pin plug, for handhelds. \$20

HM14 has 8 pin plug and 16 key keypad. \$30

Pick up in Hillsborough OR I will mail for \$10 each.

Wilson

W4BOH

YAESU HF/50MHZ Transceiver, 200Watts

Posted May 25th, 2025 by: [K8SL](#)

Contact: RKANDERSSON@HOTMAIL.COM

FTdx101MP, 200Watt, with Speaker/Power Supply FPS-01 \$4100.

Rohn Tower Sections and Tilt Base

Posted May 24th, 2025 by: W4AG

Contact: [W4AG](#)

w4ag@mindspring.com

Rohn 25 tower sections:

3 - 10 foot sections - \$50 each

1 - 9 foot top section - \$50

1 - 7 foot section - \$50

Need to be scraped and painted. Photo available on request.

73,

Stan, W4AG

Chapel Hill, NC

RARS Classifieds continued

FS: Alliance HD-73-1 Rotator Controller SK Stuff

Posted May 22nd, 2025 by: [W4BOH](#)

Contact: infomet@embargo.com

Untested, no rotator available, so returnable.
Two Speed, six wire controller.
Picture available.
\$50, in Hillsborough.
Wilson

Crossrock Stackable 6U Rack Case

Posted May 22nd, 2025 by: KC1TWR

Contact: [KC1TWR](#)

Strong Molded PE exterior with heavy duty hardware.
Twist latches and 2 handles. Standard 19" rack space, with gasket sealed.
Removable front and rear cover with 2 front rails for rack-mount.
For 6-unit rack (10.5") and 19.25" rack depth.
With Two 2U Server Rack Shelves included
Selling for \$150, like new
TimKC1TWR@gmail.com

Mirage B1016 10 in 160 OUT LINEAR AMPLIFIER (2 Meters)

Posted May 21st, 2025 by: [N1GMV](#)

Contact: n1gmv@hotmail.com

I have a working Mirage B1016 160 Watt Linear Amplifier for sale. This is perfect for your QRP rigs. I have tested it and it works well output wise but the receive pre-amp does not make any change.

Asking \$200

These usually go fast so if you want it don't wait!

I will accept Cash or Paypal

Email me if interested, I have it also listed in other places as well, I got a lot of equipment to part with so keep an eye out for more stuff soon.

73

John N1GMV (Zebulon)

RARS Classifieds continued

Raspberry Pi 3b+ with 8gb uSD

Posted May 20th, 2025 by: [KQ4ZAC](#)

Contact: kq4zac@gmail.com

I have a number of Raspberry Pi 3b+ that come with a 8 gb uSD card. uSD is an ADP high reliability type. \$30 - Tax tags and doc fee included.

I am willing to trade for a mobile VHF/UHF more modern type.

I also have a number of small fanless PCs for sale. With ram and SSD, setup for linux. Some in box. Prices vary. Get them before I put up on Ebay.

Can bring to June meeting.

Astron VS-35M Variable DC Power Supply 35A w/ Analog Meters – Tested & Working \$150

Posted May 18th, 2025 by: [N1GMV](#)

Contact: n1gmv@hotmail.com

Astron VS-35M Variable DC Power Supply 35A w/ Analog Meters – Tested & Working
\$150

FS: Kenwood TS-520 and Matching VFO-520 Deal Sweetened

Posted May 17th, 2025 by: W4BOH

Contact: [W4BOH](#)

infomet@embarqmail.com

Recent donation to DFMA, good looking radio.

Deal sweetened, speaker found. Clean, original, Kenwood matching speaker.

Here's the deal: I'm buried in stuff and need help clearing some out, so am listing this as condition unknown. The previous owner has been SK for a few years, so no help there. First class 520s are around \$300 on QTH.COM.

VFO-520 SOLD prices are mostly over \$100 on Ebay, PLUS shipping.

So here's the golden opportunity:

Pick up the TS-520 AND the VFO-520 AND the magic interconnect cable in wooded Hillsborough for \$225. You will even get a manual and, if you want, a cup of coffee OR a cold beer, maybe both.

Yes, It's a pig in a poke, but the other three I've sold worked, who knows?

Wilson
W4BOH

RARS Classifieds continued

FS: Power Supplies, 7VDC and 48VDC

Posted May 15th, 2025 by: [W4BOH](#)

Contact: infomet@embarqmail.com

Commercial quality power supplies, UNREGULATED.
7VDC at 20A and 48VDC at 4A, 120VAC input.
These are beefy supplies, built open frame on heavy aluminum angle .
Heavyish, ten pounds or so, each.
\$10 each, picked up in Hillsborough or Morrisville.
I can send pictures, if needed.
Wilson
W4BOH

FS: Heathkit A-9C Audio Amplifier

Posted May 11th, 2025 by: [W4BOH](#)

Contact: infomet@embarqmail.com

To save space, see the clever verbiage in my other ad for a Heath amplifier.
This one is an A-9C who's power transformer released its magic smoke and disappeared long ago. Good news, though, it was replaced with a transformer of conventional, not potted, construction and of somewhat more capability. The B+ is a little low but it could be raised a bit by putting silicon diodes in place of the 5U4.

The bad news is that it's only producing a few Watts (instead of 20) of output before ugly distortion sets in, so something is cattywampus in the low level front end. A little of your clever scope work will likely find a drifty resistor or leaky capacitor to be the cause. My scope shows the distortion there, before the 6L6 grids.

These go for hundreds of bucks on Ebay, over \$100 as parts units, so \$75 seems a good deal for anyone willing to drive to Hillsborough. I'll throw in a couple of 12AU7's, 12AX7's, and some diodes too!

And the money goes to The Durham FM Association!

Wilson
W4BOH

RARS Classifieds continued

FS: Heathkit Audio amplifier W-4AM

Posted May 11th, 2025 by: [W4BOH](#)

Contact: infomet@embarqmail.com

Are you a vintage audiophile (I'm almost 84.)? An audiophile of vintage equipment? I have a classic Heathkit W-4AM, from a local SK ham estate. Like many of these, its power transformer went west and hasn't been seen again. SO, YOU have the opportunity to buy it for a very reasonable price and finally use that old power transformer you've been storing, or even a new one. I obviously know nothing of its functionality, but there's nothing there that's not easily maintained with a soldering iron, except the output transformer, which I'll test for continuity.

These amps SELL, yes sell, for hundreds of bucks on Ebay, well over \$100 as parts units, so why wouldn't this one be a good deal for \$75? Heck, I'll even throw in a couple of spare 6SN7s, if you want! Since you'll be picking it up in Hillsborough, there will be no shipping cost AND you can have a coffee or beer while here, if you like.

And, best of all, you'll be supporting the Durham FM Association, which will get all the money. No extra charge for verbiage!

Wilson
W4BOH

Flex 6400 Signature SDR Radio with internal Automatic Antenna Tuner

Posted May 9th, 2025 by: [K4RLC](#)

Contact: bconder@yahoo.com

Flex 6400 Signature SDR Radio with internal Automatic Antenna Tuner. Original Box. Comes with hand microphone, Cat 5 & power cables. Accessory External USB controlled Tuning Knob (real knob). Excellent condition. Two years old. \$1450 Pick Up. Shipping extra.

RARS Classifieds continued

hy-gain IC-20 Rotator Controller

Posted May 3rd, 2025 by: W4MGT

Contact: W4MGT

jenx4321@gmail.com

Free:

I-20 Controller for use with Model AR-30/AR-40 Rotator. Solid State Antenna Direction Indicator. Manufactured October 1983.

It does need a new 240uf 40V electrolytic capacitor.

This is just the controller (no rotator).

Cushcraft R8 Vertical Antenna

Posted June 1st, 2025 by: KQ4ICK

Contact: garrydouglassmurray@gmail.com

Hello!

I have a Cushcraft R8 Antenna in perfect condition (good antenna). \$200

Minutes, Board of Directors Meeting

Raleigh Amateur Radio Society

May 6, 2025
7:00 PM on Zoom

- 1) President Fin Gold NC4FG called the meeting to order at 7 pm. RARS Board members in attendance were: Fin Gold NC4FG, Julie Royster KT4JR, Chuck Till K4RGN, Greg Seamster KE4PAX, Richard Hall KR4LH, Alan Pitegoff AB4OZ, Chuck Littlewood K4HF, Denny Oestreich KO4IBL, Tadd Torborg KA2DEW, Nancy Torborg KB2TNR, Tom Lewis N4TL, Tony O'Connor K1OC, John Honeycutt N8ZU, Jon Suen KG6K, Richard Kroeger N1FUA. There were no visitors.
- 2) Quorum Call –President Gold asked Secretary Julie Royster if a quorum was achieved and she replied that the 15 people present did constitute a quorum.
- 3) Approval of Minutes from the April 2025 Board meeting – President Gold asked for a motion to approve the April Board meeting minutes. Chuck Till so moved, and the motion was seconded and passed unanimously.
- 4) Old Business
 - a. Trustee Coordinator and Trustee Policy President Gold asked for a motion to approve the revised policy which had been under consideration at this link: <https://docs.google.com/document/d/1TEYGwu5DxjeU4gSymrgaPVnwRKM8kzHdG7s31rKf10/edit?tab=t.0> Richard Hall so moved and the motion was seconded and passed. After the death of Curt Phillips W4CP, who was the trustee for N4RAL, Tom Lewis will have to follow the newly approved policy to identify a new trustee. RARS will donate to the Bitner Fund in tribute to Curt Phillips' passing.
 - b. Criteria for free RARS membership The policy being clarified is to grant dues-free membership to anyone who obtains a new license (not an upgrade) by testing with us or who completes a class with us and then does license testing elsewhere. This membership will last for the remainder of the current fiscal year if the criterion is met before the new calendar year. The membership will last for the current and the next fiscal year if the criterion is met after the new calendar year.

RARS Board of Directors Meeting minutes continued

5) New Business

a) Red Cross Partnership

RARS has the opportunity to partner with the Red Cross, which has offered us a storage room, a shack with a base station, antennas on the building, possibly a small projects room, and space for training classes and for meetings. The main caveat is that to enter the building there must be a Red Cross member president. Currently the only RARS board member who is also a Red Cross member is Tony O'Connor. Greg Seamster pointed out there are Red Cross members that are also RARS members and that some Red Cross members were previously RARS members. Note: Fin, Tony, and Chuck Till met with Larry Holt, Donnell Nichols, and Darryll Maddox on 1/3/25. Larry and Donnell are current RARS members, and Darryll is a former RARS member. Several RARS members have volunteered to become Red Cross members. There is currently one radio antenna on the building's roof and some tall trees for stringing more antennas. If we used Red Cross space for storage and for meetings we would save over \$2000 per year. So President Gold asked for support to move forward with this opportunity. We would need to help them with their 47 MHz radios and make sure that their go boxes stay functional for emergency use. They also have one HF radio that is part of an emergency network called SHARES. Some Red Cross members also want to become hams, which they could do via our license training classes. Their building does have internet. Denny Oestreich asked questions about holding training classes at the Red Cross facility: How would he be able to access the room for educational classes? Tony says it will not be a problem. Setup before class starts will be possible. We will need a projector and a backup. Nancy Torborg said we need a newer projector and associated items. We do have large screen TVs we can use. Denny asked if instructors would be able to get to this location. Denny wants to start classes in September via signups starting in mid June. Fin says these concerns can be met. Alan Pitegoff expressed concern about abandoning the church for all meetings; President Gold stated that at least one meeting could remain at the church. President Gold asked for a motion to get this Red Cross partnership started. Tony O'Connor so moved, and the motion was seconded and passed.

b) Repeater Committee.

Fin summarized adoption of the new repeater policy document and asked for a motion to adopt the policy. Chuck Till so moved, and the motion was seconded and approved. The adopted policy link is:

<https://docs.google.com/document/d/1r1dWsznG4Pya5KVfVB6Zay64w9OHUFWTEGN5hw-ogNs/edit?tab=t.0>

c) Club Storage

Items in storage will be moved to the Red Cross building, thus saving money monthly.

RARS Board of Directors Meeting minutes continued

d) Donations Update

Fin is fixing and cleaning more of the donated spectrum analyzers. A person is assisting for no cost other than keeping one of the units. They can be sold on ebay as needed.

e) Budget Review

We have a month to discuss concerns regarding the budget. Greg Seamster has an idea about a CD to increase income. Fin Gold suggests a committee to address arguments about RARSfest income and how much we should rely on it. Tony O'Connor says we need a separate thread on Discord about raising dues. Our dues are low compared to other clubs but we have a reserve of money. We have a month to discuss the proposed budget on Discord. We must approve the proposed budget at the June board meeting to present to the members in June.

6) Officers' Reports

a) Vice-President's Report – Chuck Till K4RGN We had to make a change in the May speaker, who was not able to come in May but will come in the fall. Thanks to Tom N4TL for becoming the May speaker on short notice. The June meeting concerns Field Day, and the July speaker concerns battery technology.

b) Treasurer's Report – Greg Seamster KE4PAX

We have 559 voting members. Service has been turned off on the prior Danny Hampton hot spot. See budget report that Greg has sent to rarsboard-l.

c) Secretary's Report – Julie Royster KT4JR The minutes are up to date.

7) Committee Reports:

a) Net Manager Julie Royster, KT4JR Nets are proceeding as normal.

b) Education Director Denny Oestreich, KO4IBL A September license class is planned. Some Red Cross people are expected to participate.

c) FM Repeater Chair Jon Suen, KG6KD star is on Jon's kitchen counter and will be installed as soon as he gets duplexers. Spending comes out of the repeater fund. Greg will provide Jon a credit card to use.

d) Club License Trustees Tom Lewis, N4TL Tom contacted Brantley West K4CBW to replace Curt Phillips W4CP (now deceased) as the trustee for the N4RAL repeater. Brantley West K4CBW agreed to become the N4RAL trustee.

RARS Board of Directors Meeting minutes continued

- e) Exciter Editor Tom Lewis, N4TLTom has the next issue nearly ready but he wants input on drawing winners.
- f) RARSfest Chair Nancy Torborg, KB2TNRThe 2025 RARSfest was a great success. We have locked in April 4 as the 2026 date. Nancy is going to go to Dayton to promote RARSfest, with a comped booth.
- g) Food Service Chair Richard Kroeger, N1FUA There have been no complaints about food service.
- h) NC QSO Party Chair Marty Young, W4MY no report
- i) Field Day Chair Marty Young, W4MY Field Day site planning will happen soon.
- j) RARS VE Coordinators Richard Hall, KR4LHThe next test sessions will be at the Gathering in June and at the Cary swapfest in July.
- k) RARS Webmaster Tony O'Connor, K1OCThe website has had no recent outages.
- l) Youth Chairman Brantley West, K4CBWno report
- m) At Large Director Alan Pitegoff, AB4OZno report
- n) At Large Director Tadd Torborg, KA2DEWNo report

7) Adjournment

President Gold asked for a motion to adjourn the meeting. Chuck Till so moved, and the motion was seconded and approved. The meeting was adjourned at 7:54 pm.

Respectfully submitted,

Julie Royster, KT4JR, RARS Secretary

RARS General Membership Meeting minutes

May 13 2025, 7:30

1. Call to Order and Welcome – Fin Gold NC4FGPresident Gold called the meeting to order at 7:32 pm. He reminded online participants of a few tips about using Zoom. There were no visitors or new members. Nick Baker N4NAB was congratulated for upgrading to a general license.
2. Quorum Call: in-person + ZoomThere were 19 on Zoom plus 37 in person which sums to 56, so a quorum was achieved.
3. Approval of Club Meeting MinutesPresident Gold asked for a motion to approve the minutes of the March and April 2025 RARS meetings. The motion was made, seconded, and approved unanimously.
4. Announcements: RARS has been donated 2 Spooltenna antennas by Robert Bowser KO4HUI, the inventor. We thank Robert for this useful gift! Also, community and fellowship are central to RARS. We are saddened about the recent passing of our valued member Curt Phillips W4CP. I will now read a statement from his family: “To our friends in the radio community, on behalf of our entire family, we want to express our deepest thanks for the kindness and support you shared in this difficult time following the passing of Curtis Phillips. Curtis loved being part of the ham radio world. Your presence at his funeral meant so much to us. It was a powerful reminder of the friendships and community he built over the airwaves. We were especially touched and honored by the presentation of the Dick Bitner Award in his memory. Curtis would have been deeply humbled and proud. Thank you for standing with us, sharing stories and honoring his life in such a meaningful way, allowing us to know how respected and loved he was by his fellow operators. 73, Dottie and Dave”
5. Vice President’s Report or announcements – Chuck Till, K4RGNTThanks to tonight’s speaker, Tom Lewis N4TL. Tom offered to step in to substitute when the arranged speaker was unable to be here and was rescheduled for later in the year. The June program concerns Field Day. The July program concerns future batteries, with sodium replacing lithium.
6. Secretary’s Report or announcements – Julie Royster, KT4JRThe minutes are up to date.
7. Treasurer’s Report or announcements – Greg Seamster, KE4PAXWe have 575 members, with 560 voting members. RARSfest brought in over \$4000.

RARS General Membership Meeting minutes

8. Specific Announcements or Reports from Directors

a. Announcements by Alan Pitegoff, AB4OZ The next AB4OZ hamfest will be May 17 at Ridge Road Baptist Church.

b. The next Board Meeting 7 PM Tuesday, June 3, 2025 on Zoom, Fin Gold NC4FG

9. RARSfest Volunteer Prize Drawing - Nancy Torborg KB2TNR

Nancy thanked all the volunteers at RARSfest. She urged anyone who is going to the Dayton hamfest to come by the RARS booth. The winner of the volunteer drawing was Tom Schwartz NC4TL, who won a Yaesu radio.

10. Door Prize Drawing and picture of winners - Chuck Till, K4RGN

The winners were:

Richard Kroeger N1FUA

Charles Swindell WB4DCM

Josh Kurland KR4BTW

Joe Haggerty N4BJH

11. VP Chuck Till, K4RGN, to Introduce Program:

The Origins of the Packet Cluster and DX Spotting

Presented by Tom Lewis N4TL

After the presentation concluded. Chuck thanked Tom again for stepping in to offer this interesting program.

12. Adjournment following program.

President Gold asked for a motion to adjourn the meeting. The motion was made and seconded, and the meeting was adjourned at 8:33 pm.

Respectfully submitted,

Julie Royster KT4JR, RARS Secretary